Application Serial No.: 10/023,556 Corman et al.

Response to Office Action mailed February 2, 2006

## REMARKS

The Office Action objects to claims 37-48 as being duplicates of claims 16-27. Applicants have cancelled claims 37-48.

Applicants acknowledge the allowance of claims 7 and 16-27. The Office Action rejects claims 1, 3, 5, 8, 10-13, 15, 28-29, 31, 33, and 36 under 35 U.S.C. 102(b) as being anticipated by Hearst.

Applicants have amended claim 1 to recite a method for categorizing text comprising the steps of dividing the text into sentences, parsing the sentences into one or more noun phrases, converting the noun phrases into networks of word relationships by linking sequentially occurring noun phrases within each sentence, and analyzing the networks of word relationships to determine the influence of each word by utilizing betweenness centrality. Each centering noun phrase in the networks of word relationships is centrally related with respect to peripheral words to the centering noun phrase while the peripheral words have no relationship between one another so that any association between the peripheral words must pass through the centering noun phrase.

In the previous response, Applicants attempted to distinguish the Hearst reference in part by relying on the proper interpretation of betweenness centrality as described in the subject specification. The Examiner gave little weight to the Applicants' specification. Therefore, claim 1 is now amended to define betweenness centrality to clearly distinguish over the Hearst reference.

The Hearst reference at least does not teach or suggest the step of analyzing the networks of word relationships to determine the influence of each word by utilizing betweenness centrality. In the context of the present invention, betweenness centrality means that each centering noun phrase in the networks of word relationships is centrally related with respect to peripheral words to the centering noun phrase while the peripheral words have no relationship between one another so that any association between the peripheral words must pass through the centering noun phrase, again see page 11, line 6 through page 13, line 4 of Applicants' specification. Hearst does not teach any association through centrally related noun phrases where there is no association between words peripheral to the centering noun phrases. The Hearst reference has no feature of betweenness centrality as defined in claim 1.

Therefore, claim 1 is believed to patentably distinguish over the Hearst reference. Claims 2-3, 5, and 36 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Applicants have amended claim 8 to recite a method for analyzing text comprising the steps of dividing the text into sentences, parsing the sentences into one or more noun phrases, converting one or more words within each of the noun phrases into networks of relationships between words, analyzing the networks to determine the influence for each word by utilizing betweenness centrality, wherein each centering noun phrase in the networks of word relationships is centrally related with respect to peripheral words to the centering noun phrase while the peripheral words have no relationship between one another so that any association between the peripheral words must pass

through the centering noun phrase, and applying the analyzed networks to perform a specific analysis task.

The Hearst reference at least does not teach or suggest the step of analyzing the networks to determine the influence for each word by utilizing betweenness centrality. Each centering noun phrase in the networks of word relationships is centrally related with respect to peripheral words to the centering noun phrase while the peripheral words have no relationship between one another so that any association between the peripheral words must pass through the centering noun phrase. Hearst does not utilize betweenness centrality as recited in claim 8.

Therefore, claim 8 is believed to patentably distinguish over the Hearst reference. Claims 9-12 and 14-15 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Applicants have amended claim 28 to recite a method for analyzing text comprising the steps of (a) compartmentalizing the text into defined units, (b) categorizing the defined units by parsing the units into one or more noun phrases each comprising one or more words, converting the word or words into networks of relationships between words by linking sequentially occurring noun phrases within a defined unit, and analyzing the networks of word associations to determine the structural influence of each word by utilizing betweenness centrality, wherein each centering noun phrase in the networks of word relationships is centrally related with respect to peripheral words to the centering noun phrase while the peripheral words have no relationship between one another so that any association between the peripheral words must pass through the centering

noun phrase, and (c) applying the analyzed network to perform a specific analysis task.

The Hearst reference at least does not teach or suggest the step of analyzing the networks of word associations to determine the structural influence of each word by utilizing betweenness centrality. Each centering noun phrase in the networks of word relationships is centrally related with respect to peripheral words to the centering noun phrase while the peripheral words have no relationship between one another so that any association between the peripheral words must pass through the centering noun phrase. The Hearst reference does not utilize betweenness centrality as recited in claim 28.

Therefore, claim 28 is believed to patentably distinguish over the Hearst reference. Claims 29-31, 33, and 35 are believed to be in condition for allowance as each is dependent from an allowable base claim.

The Office Action further rejects claims 2, 9, and 30 under 35 U.S.C. 103 as being unpatentable over Hearst in view of Budzinski (US patent 571568). The 103 rejection of these dependent claims is considered moot in view of the amendments to the respective base claims.

Applicant(s) believe that all information and requirements for the application have been provided to the USPTO. If there are matters that can be discussed by telephone to further the prosecution of the Application, Applicant(s) invite the Examiner to call the undersigned attorney at the Examiner's convenience.

The Commissioner is hereby authorized to charge any fees due with this Response to U.S. PTO Account No. 17-0055.

Respectfully submitted,

QUARLES & BRADY STREICH LANG LLP

July 31, 2006

Robert D. Atkins Reg. No. 34,288

Address all correspondence to:
Robert D. Atkins
Quarles & Brady Streich Lang LLP
One Renaissance Square
Two North Central Avenue

Phoenix, AZ 85004 Telephone: (602) 229-5311 Facsimile: (602) 229-5690 E-mail: rda@quarles.com